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HOW MUCH SHOULD PONTIAC PAY ITS HEALTH OFFICER?

BY
HENRY B. BAKER,
SECRETARY OF THE STATE BOARD OF HEALTH,
LANSING, MICH.

ADDRESS DELIVERED AT THE PONTIAC SANITARY CONVENTION,
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HOW MUCH SHOULD PONTIAC PAY ITS HEALTH OFFICER?

BY HENRY B. BAKER, M. D., SECRETARY OF THE STATE BOARD OF HEALTH,
LANSING, MICH.

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I presume that most persons in this audience have formed an idea as to how much Pontiac should pay its health officer, yet probably your opinions differ greatly as to what is the proper amount. Perhaps some would say it should be the smallest amount for which any physician would consent to occupy the position. I venture to suggest that that is a very short-sighted view to take of the subject. Because it has come to be well known that many of our most fatal diseases can be prevented, especially those diseases which cause the great majority of what we call premature deaths—those among children and among people in the prime of life. From facts collected in our own State we know that in those localities where there is a good and efficient health officer, and where the people intelligently coöperate with him for the restriction of dangerous communicable diseases, there are not more than one-fifth or one-fourth of the number of cases or deaths from such dangerous diseases as scarlet fever and diphtheria as there are in localities in which such methods of restriction and prevention are not carried out. Let us study this important fact until we fully understand it, because it means that three-fourths or four-fifths of all the sickness and deaths from those diseases can be prevented. It means that we know exactly how to prevent that large proportion of the sickness and of the deaths. Are you willing to permit a continuance of sickness and deaths from diseases that are known to be in great part preventable?

An important fact in this connection is that, although these diseases are preventable, their prevention cannot be accomplished except by the general coöperation of the people of the city,—it is essential that there shall be a prompt and efficient health officer, and then it is essential that the people generally shall intelligently and faithfully aid him in the good work. Three of these dangerous communicable diseases are now present in Pontiac, and they cannot be restricted except the people of Pontiac will thoroughly coöperate with the health officer for their restriction. For the best work for the restriction of disease, it is essential that the health department of the city shall be so organized that it can act at a moment's notice,—its action should be even more prompt than is the action of the fire department, because in the case of fire there is usually only *property* at risk, whereas in the case of dangerous communicable disease it is a *question of life or death*, and perhaps to many persons. In order that a health officer can always be thus prepared, and always act thus promptly, his whole time and thought and study must be given to the subject; it will not do to wait for

his action while he is attending to some lingering case; it will not do to have his thoughts and studies mostly given to the treatment of sickness; he should employ all his time in studying how to prevent sickness and in actual work for its prevention or restriction. How much is all of his time worth? It is worth rather more than the income of the most prominent and successful practicing physician in the city; because sanitary science is one of the highest and most important sciences, and requires abilities of a high order, and because this service of the people for the saving of their lives and health is the noblest service, and because it is greatly against public policy to permit any class of persons, even so high and noble a class as the medical profession, to have a money interest in having sickness prevail, greater than the money interest of any other class that health prevail. This last suggestion may perhaps be more clearly made by a few words of explanation: In the minds of most persons there is a feeling that the relations which the medical profession sustains to the people are not just what they should be, that in some way the doctor ought to have a money interest in getting and keeping his patients well, and not have his pay stop just as soon as they recover. Under present relations his interests are, in this respect, apparently, antagonistic to the interests of the people. This feeling has found expression in the stories, which are, possibly, ideal, about how much better such relations are in some far off country about which little is known. Before we knew so much about China we used to hear that in China the doctor was paid so long as the patron was well, and his pay stopped as soon as the patron was sick. I hope it is true. And Dr. Rhodes told us this afternoon that that method is in practice in the Upper Peninsula of our own State. But without dwelling more on this point, I want to urge the very great importance of making it for the money interest of at least one of the most intelligent and faithful physicians in the city that health shall prevail. The law requires that the city shall have a health officer "who shall be a well-educated physician." In such a city as Pontiac the law should require that his entire time shall be devoted to the work, because the highest interests in the city demand that this shall be done. Then, of course, he should be paid for his entire time.

From one standpoint, then, we have learned approximately how much Pontiac should pay its health officer—that is, we would know if we knew how much the most successful physician in the city can collect. The health officer should be paid just a little more, for reasons already stated, and for the additional reason that all official positions are more or less insecure, and no physician could afford to give up his profession to engage in work which, to some extent, might unfit him for it, and run the risk of losing the position in a year or in a few years. This suggests also the fact that each year he is health officer he is gaining knowledge especially useful to the people, therefore, a good health officer should be continued in office. We may say, then, that he should receive at least two thousand dollars per year.

HOW MUCH CAN THE CITY AFFORD TO PAY?

It seems to me that the city can afford to pay for health and life-saving service about as much as its people will save by having such a service; and I think we now have facts enough to prove that a very considerable saving

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is possible. Let us examine the facts, first as to the losses, then as to how much can be saved.

The average death-rate in Michigan, when not specially influenced, is about seventeen per thousand inhabitants. Let us estimate the inhabitants of Pontiac at six thousand. Then from this time forward there would naturally be in this city 102 deaths per year, from all causes. As I have before suggested, some of those ordinary causes of deaths are preventable; that is to say three-fourths of the cases and of the deaths from certain diseases do not occur where first and subsequent cases are promptly isolated and all infected things are thoroughly disinfected. What proportion of the total deaths are from these preventable diseases? Consumption is much the most important disease, and causes nearly twelve per cent of all deaths in Michigan, but for my present purposes I am not going to consider it. The usual proportion of the deaths attributable to three other diseases known to be preventable are as follows: diphtheria, 6.5 per cent; scarlet fever, 2.7 per cent; and typhoid fever 3.2 per cent of all deaths.* At this rate, in the six thousand people which are to be in Pontiac, there would ordinarily be in a year, on the average, about seven deaths from diphtheria, about three from scarlet fever, and three from typhoid fever.†

Reliable statistics, collected by the Michigan State Board of Health, have proved that (even after the disease is introduced) about seventy-five or

**The number of reported deaths, from all causes, in Michigan during the thirteen years, 1874-86; also the number of reported deaths from Consumption, Diphtheria, Scarlet Fever and Typhoid Fever, during the same period, and what the per cent of deaths from each, and from all of these four diseases is of the deaths from all causes.*

[Compiled from Registration Reports of Michigan.]

All Deaths.	Sum of Deaths from the four Diseases.	Consumption.	Diphtheria.	Scarlet Fever.	Typhoid Fever.
198,718	48,253	23,496	12,948	5,423	6,386
Per cent.....	24.3	11.8	6.5	2.7	3.2

By the above it will be seen that 3.2 per cent of all the deaths have been from typhoid fever, 2.7 per cent from scarlet fever, 6.5 per cent from diphtheria, and 11.8 per cent from consumption; and that 24.3 per cent of all the deaths have been from these four diseases, which are now believed to be in great part preventable by measures which are practicable by intelligent people in connection with the services of an intelligent and efficient local health officer coöperating with a State Board of Health.

†Estimated saving of life which might be accomplished in Pontiac, Mich., from the three diseases, Diphtheria, Scarlet Fever and Typhoid Fever.

Diseases.	Per cent of Deaths in Michigan per annum from each of the three Diseases.	Deaths in Pontiac per annum from each of the three Diseases.	Deaths in Pontiac which might be saved each year from each of these three Diseases, at the rate of seventy-five per cent.
Diphtheria.....	6.5	6.63	4.98
Scarlet Fever.....	2.7	2.75	2.06
Typhoid Fever.....	3.2	3.26	2.45

eighty per cent of the deaths from diphtheria and from scarlet fever are prevented by thorough isolation of all infected persons, and the thorough disinfection of infected persons, things, and places, therefore the thorough enforcement of these measures, will save, in each year, in this city, or at least in the average city the size of Pontiac, about five persons from death by diphtheria, about two persons from death by scarlet fever, and I think also, two persons from death by typhoid fever. Surely the saving of these lives is well worthy the effort of your people. It cannot with certainty be done except by general and organized coöperation among you. In other words, you cannot do it without an efficient health officer; and then you must aid him to the extent required by the laws of the State. If, however, you maintain an efficient health officer, and otherwise comply with the laws, and act in accordance with the recommendations of the State Board of Health, you can certainly save these lives.

If you really desire to do it, the plans of procedure are all worked out, and most of them are embodied in State laws. The measures applicable to each of these diseases are carefully explained in the several pamphlets which the State Board of Health has issued, and which are distributed in this audience. Some of you are already familiar with these methods, and I hope that all of you will soon become familiar with them, and that there will be such a thorough support of your health officer, and such a strong public opinion as will hold him steadfastly to his duties, and such as will pay him so well for his services that he can afford to do his best for the prevention of disease, leaving to other physicians the care for those already sick.

Of course I believe that lives can be saved from other diseases than those which I have just mentioned; but I have mentioned diphtheria and scarlet fever because in those diseases we have the absolute proof that lives can be saved by measures that are well known to us, and which can be summarized in three words—"isolation and disinfection."

What is the value of the lives which may be saved? When lives of young persons are lost to a community something else is lost, namely, their prospective earnings,—the wealth which otherwise they would have created. There are several ways of estimating this loss. As mentioned by the Governor last evening, a few years ago a good negro slave was valued, for what he would earn in excess of his keeping, at about eight hundred dollars; and statisticians usually value a person in the prime of life as worth to the community about one thousand dollars.

Children are worth as much less as it will cost to raise them to the most productive age. But if the seven children, which in the average place the size of Pontiac should be saved each year from diphtheria and scarlet fever, are worth only half the price of a grown person, there is a saving of three thousand five hundred dollars a year from these two diseases alone. If two lives are saved each year from typhoid fever, by disinfection of infected matters wherever there is a case, and by other methods which a good health officer could teach, the persons saved will ordinarily be in the prime of life, and this saving should be counted as two thousand dollars. There is, then, "in sight," as it were, a saving of five thousand five hundred dollars a year in Pontiac by such work as can be done by and in connection with an efficient health officer, with reference to three of the dangerous communicable diseases. Or, to put the subject in another light, if this city were to expend

five thousand five hundred dollars a year in the exact way in which I have indicated, it would not lose money thereby,—it would only be paying, to the health officer and a few others, as much as without such payments, is, as I believe, actually lost to the people of Pontiac. Is it not better to pay money for public-health services than to bury that of as much money value in the graveyard?

We will admit, if you please, that when deaths occur, the loss is not equally distributed among the people of the city; generally the loss falls most heavily upon the bereaved family; and this is especially true if the death is of the bread-winner of the family. But it should not require much argument to show that the prosperity of a city depends greatly upon its healthfulness and the safety of life therein, and that, in a long series of years, the deaths are distributed somewhat equally among the people, and that, even if they were not equally distributed, a high moral sentiment should prompt us to guard the common safety of life among us. It was recognized even before the Declaration of Independence, that to each citizen the right to exist,—the life of the individual is among the inalienable rights to secure which “governments are instituted among men.” It is plain, therefore, that one of the highest, perhaps the very highest function of a government is to guard the lives of the people.

Having reference, then, to only three of the most important diseases, it seems plain to me that a city the size of Pontiac has the undoubted right to expend in every year five thousand five hundred dollars for the restriction and prevention of diphtheria, scarlet fever and typhoid fever. I think that there is good reason to believe that the citizens of Pontiac would make money by this work; because they would incidentally save lives and cases of sickness from other diseases than those I have mentioned; and, besides, in my account of the losses by those three diseases, I accounted only for the losses by reason of the deaths, leaving out of the account all the great expenses for the sickness. For instance, from the two diseases, diphtheria and scarlet fever alone, an efficient health service, properly supported, should in each year, save all the expenses incident to forty-three cases of dangerous sickness.* All such saving would be clear profit, in case the city expend the five thousand five hundred dollars per year, as previously suggested, and save five thousand five hundred dollars worth of lives, as I have shown may reasonably be expected.

We have seen, then, that the health officer should receive at least two thousand dollars a year; and we have now learned that the city can well afford to pay for sanitary purposes connected with three diseases, at least five thousand five hundred dollars per year. Of the three thousand five hundred dollars per year, left after paying the health officer, I would advise that at least one thousand dollars per year should be expended toward securing a water-supply which is above suspicion. This with special reference to the prevention of typhoid fever. I would use another thousand per year toward securing good sewerage, and a proper disposal of waste. The remaining five hundred dollars would pay for disinfectants, for printing annual and

*The reports compiled by the Michigan State Board of Health show that for each death from scarlet fever, there are over ten cases of sickness from that disease; that for each death from diphtheria there are four cases of sickness from diphtheria. Therefore the seven deaths on an average yearly from diphtheria in the average place the size of Pontiac, should represent twenty-eight cases of sickness, and the three deaths from scarlet fever represent thirty cases of scarlet fever,—58 cases from the two diseases; and, inasmuch as seventy-five per cent of them should be prevented by an efficient health service, forty-three of the cases should not occur.

other reports of sanitary officials, including the water and sewerage commissioners; and for other incidental expenses.

The city of Detroit pays its health officer three thousand dollars per year, and employs and pays for the services of clerks and sanitary police officers. But as a rule the cities in Michigan do not seem to have awakened to the importance of the subject. Communities have grown to be villages and villages into cities so gradually that the dangers which come to people because of their close aggregation have not attracted the attention to which their importance should entitle them. The health officers themselves know very well that they are not doing, and, as they are now paid, cannot afford to do what should be done to protect the lives and health of the people under their care. Although the health officers say little about it in their respective localities, it is not difficult for us at Lansing to learn how they feel about their compensation, and why they do not do what they know should be done. The following letter illustrates how some of them really feel:

“—————, Oct. 14, 1889.

“*Secretary, State Board of Health, Lansing, Mich.*

“ESTEEMED SIR:—Yours of the twelfth inst. at hand. Fully realizing my duties as health officer, first to the individual families, second to the community, and third to the State, how can I be expected to do all I should? The duties to the State require considerable clerical work and other attention which I do neglect, and why? Simply because since March 4th, 1889, I have done for the village what a private person would be obliged to pay about \$128.00 for, and have shirked all I could then, and perform my duties to family and community and totally neglect my duties to your office, because I receive from this village of 3,500 inhabitants \$75 per year. Do you blame me?”

[Signed] “—————, M. D.,
Health officer.”

This health officer admits that he has “shirked all he could” and yet has earned about three times as much as his salary. It is easy to preach to such an officer that he has taken a solemn official oath to perform the duties of his office according to the best of his ability, and that if he will not do that he ought to resign; but probably he knows that public opinion does not require more of him than he performs, that if he did all that he knows should be done it would require all of his time, and that for all of his time he can earn in the treatment of the sick at least one thousand, and perhaps two thousand dollars per year.

There is a law of supply and demand. The people demand and pay for their treatment when sick. They do *not* yet demand that much of the sickness shall be prevented. In Pontiac you support a number of good physicians in active practice, any one of whom would probably just as willingly serve you in the prevention of disease as in treating disease, and if paid for such service, the best one among them would soon learn to prevent as many cases as he now treats. Then how much more satisfactory that would be to all concerned!

I am a strong believer in the doctrine of conservation of energy—and that no worthy effort is wasted. I believe that good has resulted in Pontiac from the sanitary convention held here in 1883. For a time after that, there was a sanitary association here. That is a good thing for any city. But to make such an association of the greatest usefulness there must be connected

with it persons who have a money interest in sanitary work. It will not do to permit the heavy burden of it to be borne by a few persons who have no greater pecuniary interest than all other citizens of the place. Sanitary work is for the general good of all, and all should contribute to its support. The only way in which this is practicable is through a system of taxation in the most equitable way. In other words the money to carry out the sanitary work, which your local association shall decide is necessary, should come out of the general fund of your city, or a fund similar to the one which pays for fire-protection purposes. In some cities, a public meeting is called each year to decide how much money shall be raised for school purposes; and the amount voted is raised by taxation. I would recommend that a public meeting be called here annually to decide how much money shall be raised for health and life-protective purposes, and that at such meeting the subject of this paper be *one* of the topics discussed.

I sincerely hope that this convention will put new life into your local sanitary association, or cause a new association to be formed; that it will cause a public meeting in the interest of sanitary progress; that you will decide to pay your health officer such a salary as will compensate him for devoting his entire time to your service; that your city will enter more vigorously upon the work of preventing and restricting those diseases which we know so well how to restrict; and that the next time we visit Pontiac you will not have, as you now have here, three of the most dangerous of those diseases; in fact I look forward cheerfully and hopefully to the "good time coming" when sickness and premature deaths from preventable causes shall have ceased, and when the large sums of money heretofore wasted paying expenses for unnecessary sickness and funerals, and the large sums of money which shall be earned by persons whose lives have been saved through sanitary work, shall be available not only for paying for the *constant* services of Doctor Gray or some other advanced sanitarian as your health officer, and for such other sanitary improvements as an improved water-supply and a good sewerage system, but also for various other purposes which shall minister to the well-being, comfort and happiness of all of your people.

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